THE current number of *The Builder* (May 5) contains reproductions of Mr. Aston Webb's drawings of the proposed buildings to be erected in the Imperial Institute Road, South Kensington, to accommodate the physics and chemistry departments of the Royal College of Science. The original drawings are on view at the Royal Academy.

THE "Statesman's Year-book," edited by Dr. J. Scott Keltie, with the assistance of Mr. I. P. A. Renwick (Macmillan), has been accepted as a trustworthy authority upon all matters of political geography for so many years, that people familiar with its pages, and therefore conscious of the extent and accuracy of the information contained in them, regard it as one of the few essential annuals. The volume for 1900, which has just been published, is larger than any previous edition, and the numerous rearrangements of territories which were made last year have necessitated many changes in the text, several of the sections having been almost rewritten. Four specially prepared coloured maps are included, dealing with (1) the partition of North-east Africa; (2) the reorganisation of British Nigeria and the French West African territories; (3) the political partition of the Pacific; (4) the final arrangement of the boundary between British Guiana and Venezula. The "Year-book" is thus an epitome of recent geographical events as well as a manual of statistical and historical information concerning the states of the world. So long as the volume is kept so completely up to date as it is at present, it is not likely to be superseded.

IN a short note in the current number of the *Berichte*, Dr. Marckwald discusses some peculiarities shown by picric acid and its solutions, in the light of the ionic hypothesis. Picric acid, as usually obtained, has an intense yellow colour, but on recrystallising from strong hydrochloric acid it becomes nearly colourless. If this white crystalline mass is sucked nearly dry at the filter pump and washed with a little water to remove the adhering hydrochloric acid, the yellow colour at once returns. The mother liquor, which at first has only a pale yellow colour, also becomes more intensely coloured as water is added. Dr. Marckwald shows that if it be assumed that picric acid is itself colourless, but that the ions, $C_6H_2(NO_2)_3O$, are coloured, all these somewhat perplexing phenomena find an immediate explanation in terms of the theory of electrolytic dissociation.

THE confirmation of the relations deducible by thermodynamics as existing between the freezing-point and vapour pressures of a very dilute solution, although of considerable importance for the electrolytic theory of solution, presents great experimental difficulties, especially as regards the vapour pressure determinations. An ingenious method attacking this problem is described in the current *Zeitschrift für physikalische Chemie*, by Dr. R. Gahl. A measured volume of air is drawn through the solution, such as hydrochloric acid, and this is passed through pure water, the change of electrical conductivity of which is measured. The number of cases in which such a method can be applied is obviously restricted, but the accuracy attainable appears to be of the order of ·001 mm. of mercury.

THE additions to the Zoological Society's Gardens during the past week include a Grys-bok (*Raphiceros melanotis*) from South Africa, a Yellow-whiskered Lemur (*Lemur xanthomystax*) from Madagascar, presented by Mr. J. E. Matcham; a Violet-necked Lory (*Eos riciniata*) from Molluccas, presented by Mr. H. R. Filliner; two Australian Rails (*Rallus pectoralis*) from New Holland, presented by Mr. C. J. Fox; a Common Boa (*Boa constrictor*) from South America, an Egyptian Eryx (*Eryx jaculus*) from Egypt, presented by Mr. C. W. Lilley; two Eyed Lizards (*Lacerta ocellata*), European, presented respectively by Miss Robinson and Miss Ash; two Edible Frogs (*Rana esculenta*) from Biskra, presented by the Hon. Mrs. A. Cadogan; a Crowned Lemur (*Lemur coronatus*), a Black Lemur (*Lemur macaco*), two Blackish Sternotheres (*Sternothoerus nigricans*), a Radiated Tortoise (*Testudo radiata*) from Madagascar, a Slender Loris (*Loris gracilis*) from Ceylon, two Amherst's Pheasants (*Thaumalea picta*, ♂ ♀), ten Reeve's Terrapins (*Damonia reevesi*), a Three-banded Terrapin (*Cyclemmys trifasciata*) from China, a Grooved Tortoise (*Testudo calcarata*) from Khartoum, too Roofed Terrapins (*Kachuga tectum*), a Hamilton's Terrapin (*Damonia hamiltoni*) from India, a Derbian Sternothere (*Sternothoerus derbianus*), two Black Sternotheres (*Sternothoerus niger*) from West Africa, three Chequered Elaps (*Elaps lemniscatus*) from South America, a Glass Snake (*Ophiosaurus apus*), European; six Kentucky Blind Fish (*Amblyopsis speloea*) from Kentucky, deposited; a Brazilian Tapir (*Tapirus americanus*, ♂) from South America, a Cape Hunting Dog (*Lycaon pictus*, ♀) from South Africa, two Siamese Pheasants (*Euplocamus proelatus*, ♂ ♀) from Siam, two Rufous-tailed Pheasants (*Euplocamus erythropthalmus*, ♂ ♀) from Malacca, purchased; a Crowned Lemur (*Lemur coronatus*), an English Wild Cow (*Bos taurus*), born in the Gardens.

OUR ASTRONOMICAL COLUMN.

COMET GIACOBINI (1900 *a*).—This comet has been in an unfavourable position for observation during the past few weeks, but is now rapidly leaving the sun, and may be searched for in the early morning. The following ephemeris is an abridgment from one given by Herr A. Berberich, of Berlin, in the *Astronomische Nachrichten* (Bd. 152, No. 3636):—

Ephemeris for 12h. Berlin Mean Time.

1900.	R.A. h. m. s.	Decl. ° ′
May 21 ...	1 17 22 ...	+24 21·8
22 ...	16 27 ...	24 41·4
23 ...	15 30 ...	25 1·2
24 ...	14 31 ...	25 21·4
25 ...	13 29 ...	25 41·8
26 ...	12 26 ...	26 2·6
27 ...	11 21 ...	26 23·6
28 ...	10 13 ...	26 44·9
29 ...	9 3 ...	27 6·5
30 ...	7 50 ...	27 28·4
31 ...	1 6 34 ...	+27 50·6

At present the comet is moving slowly in a north-westerly direction through the constellation Pisces, almost in a line between β Arietes and α Andromedæ.

COLOUR SCREENS FOR REFRACTING TELESCOPES.—The *Astronomische Nachrichten* (Bd. 152, No. 3636) contains a description of some experiments undertaken by Messrs. T. J. J. See and G. H. Peters, at the United States Naval Observatory, to determine the utility of viewing celestial objects through variously coloured screens. It was thought that if a suitable screen was chosen which would cut off the violet light of the secondary spectrum shown by the lens, that a considerable improvement of the definition might be expected, and after trial of several types of light filter, several were found which did materially improve the seeing. The screen specially recommended consists of a solution of picric acid and chloride of copper in alcohol. This is applied in a small cell made to fit as a cap outside the eyepiece of the telescope. It is thought that the method may improve meridan work by furnishing better defined star-discs, and also planetary micrometer measurements on account of the diminution of irradiation.

PHOTOMETRIC REVISION OF HARVARD PHOTOMETRY.—The Harvard Photometry, showing the brightnesses of stars north of declination −30°, and of the sixth magnitude or brighter, was compiled from observations made during the period 1879-82. In 1891, on the return of the photometer to Cambridge from Peru, it was decided to redetermine the magnitudes of these stars, and by the end of 1894 the work was almost completed. Nearly all the observations were made by Prof. E. C. Pickering, the Director of the Observatory of Harvard College, and the results of the revision now form Part i. of the last issue of the *Annals of Harvard College Observatory*, vol. xliv.